

## SEQUENCE LISTING

<110> Tamatani, Takuya  
Tezuka, Katsunari

<120> CELL SURFACE MOLECULE MEDIATING CELL  
ADHESION AND SIGNAL TRANSMISSION

<130> 06501-039001

<140> US 09/383,551

<141> 1999-08-26

<150> PCT/JP98/00837

<151> 1998-02-27

<150> JAPAN 09-62290

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<160> 26

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<221> CDS

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gtt tta aca gga gaa atc aat ggt tct gcc aat tat gag atg ttt ata	96
Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile	
20 25 30	

ttt cac aac gga ggt gta caa att tta tgc aaa tat cct gac att gtc	144
Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val	
35 40 45	

cag caa ttt aaa atg cag ttg ctg aaa ggg ggg caa ata ctc tgc gat	192
Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp	
50 55 60	

ctc act aag aca aaa gga agt gga aac aca gtg tcc att aag agt ctg	240
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu	
65 70 75 80	

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aaa ttc tgc cat tct cag tta tcc aac aac agt gtc tct ttt ttt cta      288
Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
                        85                        90                        95

tac aac ttg gac cat tct cat gcc aac tat tac ttc tgc aac cta tca      336
Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
                        100                        105                        110

att ttt gat cct cct cct ttt aaa gta act ctt aca gga gga tat ttg      384
Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
                        115                        120                        125

cat att tat gaa tca caa ctt tgt tgc cag ctg aag ttc tgg tta ccc      432
His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
                        130                        135                        140

ata gga tgt gca gcc ttt gtt gta gtc tgc att ttg gga tgc ata ctt      480
Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
145                        150                        155                        160

att tgt tgg ctt aca aaa aag aag tat tca tcc agt gtg cac gac cct      528
Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
                        165                        170                        175

aac ggt gaa tac atg ttc atg aga gca gtg aac aca gcc aaa aaa tct      576
Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
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Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
                35                    40                    45
Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp
                50                    55                    60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
65                    70                    75                    80
Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
                85                    90                    95
Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
                100                    105                    110
Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
                115                    120                    125
His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
130                    135                    140

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Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu  
 145 150 155 160  
 Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro  
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 Arg Leu Thr Asp Val Thr Leu  
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 Leu Phe Cys Leu Arg Ile Lys Val Leu Thr Gly Glu Ile Asn Gly Ser  
 10 15 20 25  
 gcc aat tat gag atg ttt ata ttt cac aac gga ggt gta caa att tta 148  
 Ala Asn Tyr Glu Met Phe Ile Phe His Asn Gly Gly Val Gln Ile Leu  
 30 35 40  
 tgc aaa tat cct gac att gtc cag caa ttt aaa atg cag ttg ctg aaa 196  
 Cys Lys Tyr Pro Asp Ile Val Gln Gln Phe Lys Met Gln Leu Leu Lys  
 45 50 55  
 ggg ggg caa ata ctc tgc gat ctc act aag aca aaa gga agt gga aac 244  
 Gly Gly Gln Ile Leu Cys Asp Leu Thr Lys Thr Lys Gly Ser Gly Asn  
 60 65 70  
 aca gtg tcc att aag agt ctg aaa ttc tgc cat tct cag tta tcc aac 292  
 Thr Val Ser Ile Lys Ser Leu Lys Phe Cys His Ser Gln Leu Ser Asn  
 75 80 85  
 aac agt gtc tct ttt ttt cta tac aac ttg gac cat tct cat gcc aac 340  
 Asn Ser Val Ser Phe Phe Leu Tyr Asn Leu Asp His Ser His Ala Asn  
 90 95 100 105  
 tat tac ttc tgc aac cta tca att ttt gat cct cct cct ttt aaa gta 388  
 Tyr Tyr Phe Cys Asn Leu Ser Ile Phe Asp Pro Pro Pro Phe Lys Val  
 110 115 120  
 act ctt aca gga gga tat ttg cat att tat gaa tca caa ctt tgt tgc 436  
 Thr Leu Thr Gly Gly Tyr Leu His Ile Tyr Glu Ser Gln Leu Cys Cys  
 125 130 135  
 cag ctg aag ttc tgg tta ccc ata gga tgt gca gcc ttt gtt gta gtc 484  
 Gln Leu Lys Phe Trp Leu Pro Ile Gly Cys Ala Ala Phe Val Val Val

140	145	150	
tgc att ttg gga tgc ata ctt att tgt tgg ctt aca aaa aag aag tat			532
Cys Ile Leu Gly Cys Ile Leu Ile Cys Trp Leu Thr Lys Lys Lys Tyr			
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170	175	180	185
gtg aac aca gcc aaa aaa tct aga ctc aca gat gtg acc cta			622
Val Asn Thr Ala Lys Lys Ser Arg Leu Thr Asp Val Thr Leu			
190	195		
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&lt;210&gt; 4

&lt;211&gt; 2072

&lt;212&gt; DNA

&lt;213&gt; Rattus norvegicus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (35)...(634)

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Val Phe Val Phe Cys Phe Leu Ile Lys Leu Leu Thr Gly Glu Leu Asn	
10 15 20	
gac ttg gcc aat cac agg atg ttt tgc ttt cac gat gga ggt gta cag	151
Asp Leu Ala Asn His Arg Met Phe Ser Phe His Asp Gly Gly Val Gln	
25 30 35	
att tct tgt aac tac cct gag act gtc cag cag tta aaa atg cag ttg	199
Ile Ser Cys Asn Tyr Pro Glu Thr Val Gln Gln Leu Lys Met Gln Leu	
40 45 50 55	
ttc aaa gac aga gaa gtc ctc tgc gac ctc acc aag acc aag gga agc	247
Phe Lys Asp Arg Glu Val Leu Cys Asp Leu Thr Lys Thr Lys Gly Ser	
60 65 70	
gga aac acc gtg tcc atc aag aat ccg atg tcc tgt oca tat cag ctg	295
Gly Asn Thr Val Ser Ile Lys Asn Pro Met Ser Cys Pro Tyr Gln Leu	
75 80 85	
tcc aac aac agt gtc tct ttt ttc cta gac aac gca gac agc tcc cag	343
Ser Asn Asn Ser Val Ser Phe Phe Leu Asp Asn Ala Asp Ser Ser Gln	
90 95 100	
ggc agc tac ttt tta tgc agc ctg tgc att ttc gac oca ccc cct ttt	391
Gly Ser Tyr Phe Leu Cys Ser Leu Ser Ile Phe Asp Pro Pro Pro Phe	
105 110 115	
caa gaa aag aac ctt agt gga gga tat ttg ctt att tat gaa tcc cag	439
Gln Glu Lys Asn Leu Ser Gly Gly Tyr Leu Leu Ile Tyr Glu Ser Gln	
120 125 130 135	
ctt tgt tgc cag ctg aag ctt tgg tta ccc gta ggg tgt gca gct ttt	487
Leu Cys Cys Gln Leu Lys Leu Trp Leu Pro Val Gly Cys Ala Ala Phe	
140 145 150	
gtg gca gcg ctc ctt ttt gga tgc ata ttt atc gtc tgg ttt gca aaa	535
Val Ala Ala Leu Leu Phe Gly Cys Ile Phe Ile Val Trp Phe Ala Lys	
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aag aag tac aga tcc agt gtg cac gac cct aat agc gag tac atg ttc	583
Lys Lys Tyr Arg Ser Ser Val His Asp Pro Asn Ser Glu Tyr Met Phe	
170 175 180	
atg gcg gca gtc aac aca aac aaa aag tcc aga ctt gca ggt atg acc	631
Met Ala Ala Val Asn Thr Asn Lys Lys Ser Arg Leu Ala Gly Met Thr	
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Ser	
200	

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gccctggcac ttttaagatag ccttcttttag aacatgagtt agttggtagt attctgacgt 1944
gtaaacagcc tatkgttgct cggagctgga ccattttctc cacttccctg tctgcatgcc 2004
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 <222> (1) ... (600)

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ctt tta aca gga gaa atc aat ggc tgc gcc gat cat agg atg ttt tca 96
Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
20 25 30

ttt cac aat gga ggt gta cag att tct tgt aaa tac cct gag act gtc 144
Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
35 40 45

cag cag tta aaa atg cga ttg ttc aga gag aga gaa gtc ctc tgc gaa 192
Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
50 55 60

ctc acc aag acc aag gga agc gga aat gcg gtg tcc atc aag aat cca 240
Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
65 70 75 80

atg ctc tgt cta tat cat ctg tca aac aac agc gtc tct ttt ttc cta 288

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Met	Leu	Cys	Leu	Tyr	His	Leu	Ser	Asn	Asn	Ser	Val	Ser	Phe	Phe	Leu		
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aac	aac	cca	gac	agc	tcc	cag	gga	agc	tat	tac	ttc	tgc	agc	ctg	tcc		336
Asn	Asn	Pro	Asp	Ser	Ser	Gln	Gly	Ser	Tyr	Tyr	Phe	Cys	Ser	Leu	Ser		
		100						105					110				
att	ttt	gac	cca	cct	cct	ttt	caa	gaa	agg	aac	ctt	agt	gga	gga	tat		384
Ile	Phe	Asp	Pro	Pro	Pro	Phe	Gln	Glu	Arg	Asn	Leu	Ser	Gly	Gly	Tyr		
		115					120					125					
ttg	cat	att	tat	gaa	tcc	cag	ctc	tgc	tgc	cag	ctg	aag	ctc	tgg	cta		432
Leu	His	Ile	Tyr	Glu	Ser	Gln	Leu	Cys	Cys	Gln	Leu	Lys	Leu	Trp	Leu		
	130					135					140						
ccc	gta	ggg	ttg	cca	gct	ttc	gtt	gtg	gta	ctc	ctt	ttt	gga	tgc	ata		480
Pro	Val	Gly	Leu	Pro	Ala	Phe	Val	Val	Val	Leu	Leu	Phe	Gly	Cys	Ile		
145					150					155				160			
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Leu	Ile	Ile	Trp	Phe	Ser	Lys	Lys	Lys	Tyr	Gly	Ser	Ser	Val	His	Asp		
				165					170					175			
cct	aat	agt	gaa	tac	atg	ttc	atg	gcg	gca	gtc	aac	aca	aac	aaa	aag		576
Pro	Asn	Ser	Glu	Tyr	Met	Phe	Met	Ala	Ala	Val	Asn	Thr	Asn	Lys	Lys		
			180					185					190				
tct	aga	ctt	gca	ggc	gtg	acc	tca	taa									603
Ser	Arg	Leu	Ala	Gly	Val	Thr	Ser										
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 <213> Rattus norvegicus

<220>  
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 <222> (35)...(682)

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				1				5									
gtc	ttt	gtc	ttc	tgc	ttc	cta	atc	aaa	ctt	tta	aca	gga	gaa	ctc	aat		103
Val	Phe	Val	Phe	Cys	Phe	Leu	Ile	Lys	Leu	Leu	Thr	Gly	Glu	Leu	Asn		
		10					15					20					
gac	ttg	gcc	aat	cac	agg	atg	ttt	tgc	ttt	cac	gat	gga	ggc	gta	cag		151
Asp	Leu	Ala	Asn	His	Arg	Met	Phe	Ser	Phe	His	Asp	Gly	Gly	Val	Gln		
		25				30					35						
att	tct	tgt	aac	tac	cct	gag	act	gtc	cag	cag	tta	aaa	atg	cag	ttg		199
Ile	Ser	Cys	Asn	Tyr	Pro	Glu	Thr	Val	Gln	Gln	Leu	Lys	Met	Gln	Leu		
		40			45				50					55			

ttc aaa gac aga gaa gtc ctc tgc gac ctc acc aag acc aag gga agc 247  
 Phe Lys Asp Arg Glu Val Leu Cys Asp Leu Thr Lys Thr Lys Gly Ser  
                   60                  65                  70

gga aac acc gtg tcc atc aag aat ccg atg tcc tgt cca tat cag ctg 295  
 Gly Asn Thr Val Ser Ile Lys Asn Pro Met Ser Cys Pro Tyr Gln Leu  
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tcc aac aac agt gtc tct ttt ttc cta gac aac gca gac agc tcc cag 343  
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                   90                  95                  100

ggc agc tac ttt tta tgc agc ctg tcg att ttc gac cca ccc cct ttt 391  
 Gly Ser Tyr Phe Leu Cys Ser Leu Ser Ile Phe Asp Pro Pro Pro Phe  
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caa gaa aag aac ctt agt gga gga tat ttg ctt att tat gaa tcc cag 439  
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   120                  125                  130                  135

ctt tgt tgc cag ctg aag ctt tgg tta ccc gta ggg tgt gca gct ttt 487  
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                   140                  145                  150

gtg gca gcg ctc ctt ttt gga tgc ata ttt atc gtc tgg ttt gca aaa 535  
 Val Ala Ala Leu Leu Phe Gly Cys Ile Phe Ile Val Trp Phe Ala Lys  
                   155                  160                  165

aag aag tac aga tcc agt gtg cac gac cct aat agc gag tac atg ttc 583  
 Lys Lys Tyr Arg Ser Ser Val His Asp Pro Asn Ser Glu Tyr Met Phe  
           170                  175                  180

atg gcg gca gtc aac aca aac aaa aag tcc aga ctt gca ggt aca gca 631  
 Met Ala Ala Val Asn Thr Asn Lys Lys Ser Arg Leu Ala Gly Thr Ala  
           185                  190                  195

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 Pro Leu Arg Ala Leu Gly Arg Gly Glu His Ser Ser Cys Gln Asp Arg  
   200                  205                  210                  215

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 Asn

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<210> 7

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<212> DNA

<213> Artificial Sequence

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<223> primer for PCR

<400> 7



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27

<210> 8

<211> 32

<212> DNA

<213> Artificial Sequence

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<223> primer for PCR

<400> 3

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32

<210> 9

<211> 30

<212> DNA

<213> Artificial Sequence

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<213> Artificial Sequence

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<400> 10

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30

<210> 11

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<213> Artificial Sequence

<220>

<223> primer for PCR

<400> 11

cgtgatattg ctgaagagct tggcggcgaa tgggc

35

<210> 12

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> primer for PCR

<400> 12

cattcaagtt tcagggaact agtccatgcg ttcc

34

<210> 13  
 <211> 200  
 <212> PRT  
 <213> Rattus norvegicus

<400> 13

Met	Lys	Pro	Tyr	Phe	Ser	Cys	Val	Phe	Val	Phe	Cys	Phe	Leu	Ile	Lys
1				5					10					15	
Leu	Leu	Thr	Gly	Glu	Leu	Asn	Asp	Leu	Ala	Asn	His	Arg	Met	Phe	Ser
			20					25					30		
Phe	His	Asp	Gly	Gly	Val	Gln	Ile	Ser	Cys	Asn	Tyr	Pro	Glu	Thr	Val
		35				40					45				
Gln	Gln	Leu	Lys	Met	Gln	Leu	Phe	Lys	Asp	Arg	Glu	Val	Leu	Cys	Asp
	50				55					60					
Leu	Thr	Lys	Thr	Lys	Gly	Ser	Gly	Asn	Thr	Val	Ser	Ile	Lys	Asn	Pro
65				70					75					80	
Met	Ser	Cys	Pro	Tyr	Gln	Leu	Ser	Asn	Asn	Ser	Val	Ser	Phe	Phe	Leu
			85					90					95		
Asp	Asn	Ala	Asp	Ser	Ser	Gln	Gly	Ser	Tyr	Phe	Leu	Cys	Ser	Leu	Ser
		100					105						110		
Ile	Phe	Asp	Pro	Pro	Pro	Phe	Gln	Glu	Lys	Asn	Leu	Ser	Gly	Gly	Tyr
		115				120					125				
Leu	Leu	Ile	Tyr	Glu	Ser	Gln	Leu	Cys	Cys	Gln	Leu	Lys	Leu	Trp	Leu
	130					135				140					
Pro	Val	Gly	Cys	Ala	Ala	Phe	Val	Ala	Ala	Leu	Leu	Phe	Gly	Cys	Ile
145				150				155						160	
Phe	Ile	Val	Trp	Phe	Ala	Lys	Lys	Lys	Tyr	Arg	Ser	Ser	Val	His	Asp
			165					170					175		
Pro	Asn	Ser	Glu	Tyr	Met	Phe	Met	Ala	Ala	Val	Asn	Thr	Asn	Lys	Lys
		180					185						190		
Ser	Arg	Leu	Ala	Gly	Met	Thr	Ser								
		195					200								

<210> 14  
 <211> 200  
 <212> PRT  
 <213> Mus musculus

<400> 14

Met	Lys	Pro	Tyr	Phe	Cys	His	Val	Phe	Val	Phe	Cys	Phe	Leu	Ile	Arg
1				5					10					15	
Leu	Leu	Thr	Gly	Glu	Ile	Asn	Gly	Ser	Ala	Asp	His	Arg	Met	Phe	Ser
			20					25					30		
Phe	His	Asn	Gly	Gly	Val	Gln	Ile	Ser	Cys	Lys	Tyr	Pro	Glu	Thr	Val
		35				40					45				
Gln	Gln	Leu	Lys	Met	Arg	Leu	Phe	Arg	Glu	Arg	Glu	Val	Leu	Cys	Glu
	50				55					60					
Leu	Thr	Lys	Thr	Lys	Gly	Ser	Gly	Asn	Ala	Val	Ser	Ile	Lys	Asn	Pro
65				70					75					80	
Met	Leu	Cys	Leu	Tyr	His	Leu	Ser	Asn	Asn	Ser	Val	Ser	Phe	Phe	Leu
			85					90					95		
Asn	Asn	Pro	Asp	Ser	Ser	Gln	Gly	Ser	Tyr	Tyr	Phe	Cys	Ser	Leu	Ser
		100					105						110		
Ile	Phe	Asp	Pro	Pro	Pro	Phe	Gln	Glu	Arg	Asn	Leu	Ser	Gly	Gly	Tyr
		115				120					125				
Leu	His	Ile	Tyr	Glu	Ser	Gln	Leu	Cys	Cys	Gln	Leu	Lys	Leu	Trp	Leu
	130					135				140					

```

Pro Val Gly Leu Pro Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
145                      150                      155                      160
Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
                      165                      170                      175
Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
                      180                      185                      190
Ser Arg Leu Ala Gly Val Thr Ser
                      195                      200

```

```

<210> 15
<211> 216
<212> PRT
<213> Rattus norvegicus

```

```

<400> 15
Met Lys Pro Tyr Phe Ser Cys Val Phe Val Phe Cys Phe Leu Ile Lys
1      5      10      15
Leu Leu Thr Gly Glu Leu Asn Asp Leu Ala Asn His Arg Met Phe Ser
20     25     30
Phe His Asp Gly Gly Val Gln Ile Ser Cys Asn Tyr Pro Glu Thr Val
35     40     45
Gln Gln Leu Lys Met Gln Leu Phe Lys Asp Arg Glu Val Leu Cys Asp
50     55     60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro
65     70     75     80
Met Ser Cys Pro Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
85     90     95
Asp Asn Ala Asp Ser Ser Gln Gly Ser Tyr Phe Leu Cys Ser Leu Ser
100    105    110
Ile Phe Asp Pro Pro Pro Phe Gln Glu Lys Asn Leu Ser Gly Gly Tyr
115    120    125
Leu Leu Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
130    135    140
Pro Val Gly Cys Ala Ala Phe Val Ala Ala Leu Leu Phe Gly Cys Ile
145    150    155    160
Phe Ile Val Trp Phe Ala Lys Lys Lys Tyr Arg Ser Ser Val His Asp
165    170    175
Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
180    185    190
Ser Arg Leu Ala Gly Thr Ala Pro Leu Arg Ala Leu Gly Arg Gly Glu
195    200    205
His Ser Ser Cys Gln Asp Arg Asn
210    215

```

```

<210> 16
<211> 200
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> consensus sequence

<221> VARIANT
<222> (1)...(200)
<223> Xaa = Any Amino Acid

```

```

<400> 16

```

```

Met Lys Pro Tyr Phe Xaa Xaa Val Phe Val Phe Cys Phe Leu Ile Lys
1      5      10      15
Leu Leu Thr Gly Glu Xaa Asn Xaa Xaa Ala Asn His Arg Met Phe Ser
20      25      30
Phe His Xaa Gly Gly Val Gln Ile Ser Cys Xaa Tyr Pro Glu Thr Val
35      40      45
Gln Gln Leu Lys Met Gln Leu Phe Lys Xaa Arg Glu Val Leu Cys Asp
50      55      60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro
65      70      75      80
Met Xaa Cys Xaa Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
85      90      95
Xaa Asn Xaa Asp Ser Ser Gln Gly Ser Tyr Xaa Xaa Cys Ser Leu Ser
100     105     110
Ile Phe Asp Pro Pro Pro Phe Gln Glu Xaa Asn Leu Ser Gly Gly Tyr
115     120     125
Leu Xaa Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
130     135     140
Pro Val Gly Cys Ala Ala Phe Val Xaa Xaa Leu Leu Phe Gly Cys Ile
145     150     155     160
Xaa Ile Xaa Trp Phe Xaa Lys Lys Lys Tyr Xaa Ser Ser Val His Asp
165     170     175
Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
180     185     190
Ser Arg Leu Ala Gly Xaa Thr Xaa
195     200

```

<210> 17

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> consensus sequence

<221> VARIANT

<222> (1)...(214)

<223> Xaa = Any Amino Acid

<400> 17

```

Met Leu Xaa Leu Xaa Leu Ala Trp Xaa Leu Xaa Leu Phe Xaa Leu Xaa
1      5      10      15
Ile Xaa Val Xaa Xaa Xaa Xaa Ile Xaa Val Xaa Gln Xaa Xaa Xaa Xaa
20      25      30
Xaa Ala Xaa Xaa Asn Gly Xaa Xaa Xaa Xaa Xaa Cys Lys Tyr Xaa Xaa
35      40      45
Pro Xaa Xaa Xaa Xaa Glu Phe Arg Xaa Xaa Leu Leu Lys Gly Xaa Asp
50      55      60
Ser Xaa Val Xaa Xaa Cys Xaa Xaa Xaa Xaa Thr Tyr Xaa Xaa Gly Asn
65      70      75      80
Xaa Val Xaa Xaa Lys Xaa Xaa Xaa Xaa Cys Xaa Gly Xaa Leu Ser Asn
85      90      95
Asn Ser Val Xaa Phe Xaa Leu Gln Asn Leu Xaa Xaa Xaa Xaa Thr Xaa
100     105     110
Xaa Tyr Phe Cys Lys Xaa Glu Xaa Met Tyr Pro Pro Pro Tyr Xaa Xaa
115     120     125
Xaa Xaa Xaa Asn Gly Thr Xaa Ile His Val Xaa Xaa Xaa Xaa Leu Cys

```

```

      130              135              140
Pro Xaa Xaa Xaa Phe Xaa Xaa Trp Xaa Leu Xaa Xaa Val Xaa Xaa Xaa
145              150              155              160
Leu Xaa Xaa Tyr Ser Xaa Leu Xaa Thr Ala Xaa Ile Xaa Xaa Xaa Xaa
      165              170              175
Xaa Lys Lys Arg Ser Xaa Leu Xaa Xaa Gly Xaa Tyr Met Xaa Met Xaa
      180              185              190
Pro Xaa Xaa Pro Xaa Xaa Xaa Xaa Lys Xaa Xaa Gln Pro Tyr Xaa Xaa
      195              200              205
Asp Phe Xaa Xaa Xaa Xaa
      210

```

```

<210> 18
<211> 6
<212> PRT
<213> Homo sapiens

```

```

<400> 18
Met Tyr Pro Pro Pro Tyr
  1              5

```

```

<210> 19
<211> 4
<212> PRT
<213> Homo sapiens

```

```

<400> 19
Tyr Met Asn Met
  1

```

```

<210> 20
<211> 4
<212> PRT
<213> Homo sapiens

```

```

<400> 20
Tyr Val Lys Met
  1

```

```

<210> 21
<211> 6
<212> PRT
<213> Homo sapiens

```

```

<400> 21
Phe Asp Pro Pro Pro Phe
  1              5

```

```

<210> 22
<211> 4
<212> PRT
<213> Homo sapiens

```

```

<400> 22
Tyr Met Phe Met
  1

```

<210> 23  
 <211> 216  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> consensus sequence

<221> VARIANT  
 <222> (1)...(216)  
 <223> Xaa = Any Amino Acid

<400> 23  
 Met Lys Pro Tyr Phe Ser Cys Val Phe Val Phe Cys Phe Leu Ile Lys  
 1 5 10 15  
 Leu Leu Thr Gly Glu Leu Asn Asp Leu Ala Asn His Arg Met Phe Ser  
 20 25 30  
 Phe His Asp Gly Gly Val Gln Ile Ser Cys Asn Tyr Pro Glu Thr Val  
 35 40 45  
 Gln Gln Leu Lys Met Gln Leu Phe Lys Asp Arg Glu Val Leu Cys Asp  
 50 55 60  
 Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro  
 65 70 75 80  
 Met Ser Cys Pro Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu  
 85 90 95  
 Asp Asn Ala Asp Ser Ser Gln Gly Ser Tyr Phe Leu Cys Ser Leu Ser  
 100 105 110  
 Ile Phe Asp Pro Pro Pro Phe Gln Glu Lys Asn Leu Ser Gly Gly Tyr  
 115 120 125  
 Leu Leu Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu  
 130 135 140  
 Pro Val Gly Cys Ala Ala Phe Val Ala Ala Leu Phe Gly Cys Ile  
 145 150 155 160  
 Phe Ile Val Trp Phe Ala Lys Lys Lys Tyr Arg Ser Ser Val His Asp  
 165 170 175  
 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys  
 180 185 190  
 Ser Arg Leu Ala Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 195 200 205  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 210 215

<210> 24  
 <211> 16  
 <212> PRT  
 <213> Rattus norvegicus

<400> 24  
 Leu Arg Ala Leu Gly Arg Gly Glu His Ser Ser Cys Gln Asp Arg Asn  
 1 5 10 15

<210> 25  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 25

```

Met Leu Arg Leu Leu Leu Ala Leu Asn Leu Phe Pro Ser Ile Gln Val
 1          5          10          15
Thr Gly Asn Lys Ile Leu Val Lys Gln Ser Pro Met Leu Val Ala Tyr
          20          25          30
Asp Asn Ala Val Asn Leu Ser Cys Lys Tyr Ser Tyr Asn Leu Phe Ser
          35          40          45
Arg Glu Phe Arg Ala Ser Leu His Lys Gly Leu Asp Ser Ala Val Glu
          50          55          60
Val Cys Val Val Tyr Gly Asn Tyr Ser Gln Gln Leu Gln Val Tyr Ser
65          70          75          80
Lys Thr Gly Phe Asn Cys Asp Gly Lys Leu Gly Asn Glu Ser Val Thr
          85          90          95
Phe Tyr Leu Gln Asn Leu Tyr Val Asn Gln Thr Asp Ile Tyr Phe Cys
          100          105          110
Lys Ile Glu Val Met Tyr Pro Pro Tyr Leu Asp Asn Glu Lys Ser
          115          120          125
Asn Gly Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro
130          135          140
Leu Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly
145          150          155          160
Gly Val Leu Ala Cys Tyr Ser Leu Leu Val Thr Val Ala Phe Ile Ile
          165          170          175
Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met
          180          185          190
Asn Met Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro
          195          200          205
Tyr Ala Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser
          210          215          220

```

&lt;210&gt; 26

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

```

Met Ala Cys Leu Gly Phe Gln Arg His Lys Ala Gln Leu Asn Leu Ala
 1          5          10          15
Ala Arg Thr Trp Pro Cys Thr Leu Leu Phe Phe Leu Leu Phe Ile Pro
          20          25          30
Val Phe Cys Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala
          35          40          45
Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly
          50          55          60
Lys Ala Tyr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln
65          70          75          80
Val Thr Glu Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr
          85          90          95
Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val
          100          105          110
Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile
          115          120          125
Cys Lys Val Glu Leu Met Tyr Pro Pro Tyr Tyr Leu Gly Ile Gly
130          135          140
Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser
145          150          155          160
Asp Phe Leu Leu Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe
          165          170          175

```

Tyr	Ser	Phe	Leu	Leu	Thr	Ala	Val	Ser	Leu	Ser	Lys	Met	Leu	Lys	Lys
			180					185					190		
Arg	Ser	Pro	Leu	Thr	Thr	Gly	Val	Tyr	Val	Lys	Met	Pro	Pro	Thr	Glu
		195					200					205			
Pro	Glu	Cys	Glu	Lys	Gln	Phe	Gln	Pro	Tyr	Phe	Ile	Pro	Ile	Asn	
	210					215					220				